

CLAIMS

What is claimed is:

- 1 1. An aerial video camera system comprising:
 - 2 a camera having electronic control by a universal-control computer that
 - 3 is positioned predeterminedly in an aircraft;
 - 4 the camera being attached to a pan-tilt head that is suspended rigidly
 - 5 from a base plate in a camera pod;
 - 6 a linear giro and a lateral giro affixed to the base plate for universal
 - 7 damping of vibration from the aircraft;
 - 8 the vibration from the aircraft being absorbed by a resilient mount
 - 9 intermediate the base plate and the camera pod that is attached to the aircraft;
 - 10 a transparent radome that is articulated and extended downwardly from
 - 11 a bottom of the camera pod for housing swivel panning and tilting view for the
 - 12 camera; and
 - 13 electronic-control communication having control lines intermediate the
 - 14 universal-control computer, the camera and the pan-tilt head.

- 1 2. The aerial video camera system of claim 1 wherein:
 - 2 the camera includes a digital camera from which a field of view of
 - 3 optical signal is transmitted to and shown on a monitor of the universal-control
 - 4 computer and available for recording and broadcasting.

1 3. The aerial video camera system of claim 1 wherein:
2 the camera pod includes an attachment bracket that is articulated for
3 attaching the camera to the aircraft with a wing-strut bolt proximate a junction of
4 a bottom member of a lift wing and a wing strut of the aircraft.

1 4. The aerial video camera system of claim 3 wherein:
2 the attachment bracket includes articulation for supporting the camera
3 on a predetermined aircraft-camera support.

1 5. The aerial video camera system of claim 1 wherein:
2 swivel panning of the camera on the pan-tilt head is horizontally
3 rotational.

1 6. The aerial video camera system of claim 1 wherein:
2 the camera pod includes a predeterminedly aerodynamic surface having
3 an arcuate-airfoil forward portion, a pointedly narrow aft portion and the attachment
4 bracket extended upwardly from a top surface; and
5 the attachment bracket is sized and shaped to receive a portion of the
6 wing-strut bolt.

1 7. The aerial video camera system of claim 1 wherein:
2 the resilient mount includes counter-resilient fasteners having counter-
3 resilient support of the base plate on the camera pod;
4 the counter-resilient fasteners have top ends supported by a top of the
5 camera pod and bottom ends positioned in support of a bottom resilient member
6 under a bottom side of the base plate; and
7 a top resilient member is positioned intermediate the camera pod and
8 the base plate.

1 8. The aerial video camera system of claim 1 wherein:
2 the universal-control computer includes joystick control of horizontally
3 panning and vertically tilting of the camera on the pan-tilt head with a joystick.

1 9. The aerial video camera system of claim 1 wherein:
2 the universal-control computer includes toggle-switching of power on
3 and off with a toggle switch as indicated with a power LED.

1 10. The aerial video camera system of claim 1 wherein:
2 the universal-control computer includes control of camera speed with
3 a speed knob.

1 **11.** The aerial video camera system of claim 1 wherein:

2 the universal-control computer includes control of a plurality of camera

3 features of the camera and the digital camera with predetermined pushbuttons.

1 **12.** The aerial video camera system of claim 11 wherein:

2 the plurality of camera features include focus and zoom.

1 **13.** An aerial video camera system comprising:

2 a camera having electronic control by a universal-control computer that

3 is positioned predeterminedly in an aircraft;

4 a transparent radome that is articulated and extended downwardly from

5 the camera pod for housing swivel panning and tilting view for the camera; and

6 electronic-control communication having control lines intermediate the

7 camera and the universal-control computer.

1 **14.** The aerial video camera system of claim 13 wherein:

2 the camera is attached to the pan-tilt head that is suspended rigidly from

3 the base plate;

4 the linear giro and the lateral giro are affixed to the base plate for

5 universal damping of vibration from the aircraft; and

6 the vibration from the aircraft is absorbed by the resilient mount

7 intermediate the base plate and the camera pod that is attached to the aircraft.

1 **15.** The aerial video camera system of claim **14** wherein:

2 the resilient mount includes counter-resilient fasteners having counter-
3 resilient support of the base plate on the camera pod;

4 the counter-resilient fasteners have top ends supported by a top of the
5 camera pod and bottom ends positioned in support of a bottom resilient member
6 under a bottom side of the base plate; and

7 a top resilient member is positioned intermediate the camera pod and
8 the base plate.

1 **16.** The aerial video camera system of claim **13** wherein:

2 the camera includes a digital camera from which a field of view of
3 optical signal is transmitted to and shown on a monitor of the universal-control
4 computer and available for recording and broadcasting.

1 **17.** The aerial video camera system of claim **13** wherein:

2 the camera pod includes an attachment bracket that is articulated for
3 attaching the camera to the aircraft with a wing-strut bolt proximate a junction of
4 a bottom member of a lift wing and a wing strut of the aircraft.

1 **18.** The aerial video camera system of claim **13** wherein:

2 swivel panning of the camera on the pan-tilt head is full-circle
3 horizontally rotational.

1 **19.** The aerial video camera system of claim 13 wherein:

2 the universal-control computer includes joystick control of horizontally

3 panning and vertically tilting of the camera on the pan-tilt head with a joystick.

1 **20.** The aerial video camera system of claim 19 wherein:

2 the universal-control computer includes control of a plurality of camera

3 features of the camera.

1 **21.** The aerial video camera system of claim 20 wherein:

2 the plurality of camera features include on-off switching, camera speed

3 camera focus and camera zoom.